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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/553,773

10/19/2005

Dug-Sung Joo

2017-039

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IPLA P.A.

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17TH FLOOR

LOS ANGELES, CA 90010

EXAMINER

KENNEDY, JOSHUA T

ART UNIT

PAPER NUMBER

3679

MAIL DATE

DELIVERY MODE

07/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/553,773

Applicant(s)

JOO, DUG-SUNG

Examiner

Joshua T. Kennedy

Art Unit

3679

JK

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5 and 6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5 and 6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 June 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings were received on 6/18/2007. These drawings are acceptable.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. **It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.**

Claims 1-3, 5, and 6 have been examined.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1, 2, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Lancelot III (US Patent 6,099,196) in view of Harrall et al (US Patent 2,066,276).

As to Claim 1. Lancelot III discloses a reinforcing bar coupler, comprising:

a cover unit (24") having a circular hole therein and comprising two or more pieces capable of covering a circumference of a reinforcing bar (50a, 50b), with outer surfaces of the pieces being inclined in the same direction to form a tapered surface (59; Claim 1, Lines 5-9), and a plurality of annular grooves (Col 1, Lines 59-63) being provided on an inner surface of each of the pieces so that an annular rib (52; Claim 1, Lines 3-4) of the reinforcing bar is capable of being seated in one of the plurality of annular grooves (Col 1, Lines 59-63); and

a locking bushing (62; Claim 1, Lines 9-12) having a shape of a pipe or a ring, each having on an inner surface thereof a tapered surface to correspond to the tapered surface of the cover unit (Fig 6; Column 4, Lines 15-37; Claim 1, Lines 13-18).

However, Lancelot III does not disclose the locking bushing comprising a pair of locking bushings being disposed substantially around and lock two ends of the cover unit and being configured to be driven along a longitudinal direction.

Harrall et al teach a bar end coupling member having a locking bushing comprising a pair of locking bushings (15, 16) to improve the "holding power of the coupling" (Col 2, Lines 1-2). Harrall et al also teach that a single collar and a plurality of collars are interchangeably used in such an application of the art (Col 2, Lines 25-34).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the bushing of Lancelot III to have a plurality of collars as taught by Harrall et al to improve the holding power of the coupling.

As to Claim 2. Lancelot III discloses the cover unit (24") comprising a pair of pieces each having a semi-circular cross-section, with outer surfaces of the pieces being inclined in the same direction to form a tapered surface (59), and

the locking bushing (62) has a shape of a pipe having a circular cross-section, with an inner surface of the pipe being formed to be in close contact with the tapered surface of the cover unit (Fig 6).

As to Claims 5 and 6. Lancelot III discloses a bar coupling method (Claim 9; Col 4, Lines 15-34), comprising:

placing ends of reinforcing bars so that the ends of the reinforcing bars are butted on each other;

placing the two or more pieces to surround the ends of the reinforcing bars; and

fitting the two or more locking bushings in one longitudinal direction (Col 2, Lines 26-29), from a smaller diameter part to a larger diameter part of the cover unit, through a drive fitting method so that the tapered surfaces provided on the inner surfaces of the locking bushings come into close contact with the tapered surfaces of the pieces.

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Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lancelot III in view of Harrall et al as applied to claims 1, 2, 5, and 6 above, and further in view of Kim (US Patent 6,860,672).

Lancelot III in view of Harrall et al disclose the reinforcing bar coupler significantly as claimed, but do not disclose the cover unit comprising a lateral groove provided on an inner surface of the cover unit in a lengthwise direction thereof so that a lateral rib is capable of being seated in the lateral groove.

Kim teaches a similar bar end coupler having a the cover unit (2) comprising a lateral groove provided on an inner surface of the cover unit in a lengthwise direction thereof so that a lateral rib is capable of being seated in the lateral groove "since there may be difficulty to insert reinforcing bars into the cylindrical sleeve such that the reinforcing bars radially coincide with each other" (Col 3, Lines 59-65). It would have been obvious to one of ordinary skill in the art to modify the reinforcing bar coupler of Lancelot III in view of Harrall et al to have lateral grooves as taught by Kim on the interior of the cover unit to align the reinforcing bars such that they radially coincide with each other.

Response to Arguments

Applicant's arguments filed 6/18/2007 have been fully considered but they are not persuasive.

As to Claim 4, Applicant argues:

"Even though Harrall discloses two collars (15,16), they do not suggest the structure and function of the two or more locking bushings of the present

invention, which are driven in one longitudinal direction from the small-diameter part to the larger-diameter part."

Examiner respectfully disagrees. Harrall discloses the bushing structures as is claimed (and set forth in the rejection above) and discloses the bushings being driven in one longitudinal direction as is claimed (and is set forth above). It is well established that a recitation with respect to the manner in which an apparatus is intended to be employed, *i.e.*, a functional limitation, does not impose any structural limitation upon the claimed apparatus which differentiates it from a prior art reference disclosing the structural limitations of the claim. In re Pearson, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974); In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); In re Otto, 312 F.2d 937, 136 USPQ 458 (CCPA 1963). Where the prior art reference is inherently capable of performing the function described in a functional limitation, such functional limitation does not define the claimed apparatus over such prior art reference, regardless of whether the prior art reference explicitly discusses such capacity for performing the recited function. In re Ludtke, 441 F.2d 660, 169 USPQ 563 (CCPA 1971). In addition, where there is reason to believe that such functional limitation may be an inherent characteristic of the prior art reference, Applicant is required to prove that the subject matter shown in the prior art reference does not possess the characteristic relied upon. In re Spada, 911 F.2d 705, 15 USPQ2d 1655 (Fed. Cir. 1990); In re King, 801 F.2d 1324, 1327, 231 USPQ 136, 138 (Fed. Cir. 1986); In re Ludtke, 441 F.2d at 664, 169 USPQ at 566 (CCPA 1971); In re Schreiber, 128 F.3d at 1473, 44 USPQ2d 1429 (Fed. Cir. 1997).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patents 7118299, 4408926, 6773198, 3921281, 5308184, 5193932, and US Patent Application Publications 2003/0053856 2003/0012596.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua T. Kennedy whose telephone number is (571) 272-8297. The examiner can normally be reached on M-F: 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


JTK
6/26/2007



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